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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/022,122	12/14/2001	Shai Dckel	18104.0013U2	2500
25937 7590 06/29/2007 ZARETSKY & ASSOCIATES PC 8753 W. RUNION DR. PEORIA, AZ 85382-6412			EXAMINER DANG, DUY M	
			ART UNIT 2624	PAPER NUMBER
			MAIL DATE 06/29/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

**Office Action Summary**

Application No.

10/022,122

Applicant(s)

DEKEL ET AL.

Examiner

Duy M. Dang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 2/28/07 and 4/13/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 6,10,16,20,26 and 30-54 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 6,10,16,20,26,30-37 and 39-54 is/are rejected.
- 7) ☒ Claim(s) 38 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### *Continued Examination Under 37 CFR 1.114*

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 2/28/07 has been entered.

### *Response to Arguments*

2. Applicant's arguments filed on February 28, 2007 have been fully considered but they are not fully persuasive.

Applicant's response set forth at pages 11-12 with regard to the 101 rejection of claims 43-48 are found to be persuasive and therefore, such rejection has been withdrawn.

Applicant's response set forth at page 12 with regard to the double-patenting rejection of claims 6, 10, 16, 20, 26, and 30-33, 35-37, and 39-54 are not persuasive. It is noted that Applicant has relied on the ground that of "*the '452 patent teaches...transmitting two dimensional (2D) images...whereas the present invention...a system and method for streaming three dimensional (3D) images...the specification of the present invention...detailed descriptions of the mechanism of performing a 3D wavelet transform on a 3D source image...the disclosure related to the 3D wavelet transforming processing and streaming found in the present application is not found in the '452 patent.*" First, it is noted that the instant claim 6, for example, does not recite "*streaming three dimensional (3D) images*" and "*detailed descriptions of mechanism of performing a 3D wavelet transform on 3D source image*" any where. Applicant is

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reminded that the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Furthermore, the examiner is entitled to give the broadest reasonable interpretation to the language of the claims and not limited to applicant's definition which is not specifically set forth in the claims. In *re Tanaka et al.*, 193 USPQ, (CCPA) 1977. Second, the '452 patent does teach 3D wavelet transform (see column 5 line 49 to column 6 line 19. Specifically, the equation 1.1 depicted at column 6 lines 19 comprises three dimensions namely  $t_x$ ,  $t_y$ , and  $t_{\text{resolution}}$ ) and streaming three dimensional images (see column 31 lines 49-51 and column 32 lines 1-4). Third, it is noted that the patent to Chang has not been applied in the double-patenting rejection thus such argument is moot in reply. Therefore, the '452 patent does teach claimed invention and thus the examiner maintains the double-patenting rejection in this Office action. Furthermore, it is also noted that Applicant's arguments set forth at

Applicant's response set forth at page 12 with regard 112(2) rejection of claims 6, 10, 31-34, and 43-50 are found to be persuasive and therefore, such rejection has been withdrawn.

Applicant's argument set forth at pages 13-17 with regard to the 102(e) rejections of claims 6, 10, 16, 20, 26, 30-33, 35-37, and 39-54 are not persuasive and the reasons as follows:

(a) In response to Applicant's argument set forth at page 13 last 3 lines to page 15 line 10, the examiner respectfully disagrees. First Chang teaches 3D wavelet transform (see figures 3A and 3B in together with column 6 line 7 to column line 63. Specifically, the cited portion at lines 15-29 and figures 3A and 3B satisfy so called 3D wavelet transform. The level is the third dimension). Since the instant claim 6, for example, merely recites "three dimensional wavelet

transform” in lines 12-13, then 3D wavelet transform in Change clearly satisfies claimed requirement that of “three dimensional wavelet transform”.

(b)In response to Applicant’s argument as set forth at lines 6-7 of page 14 that of “Chang et al. does not teach or suggest a scheme for transferring three dimensional images”, it is the false accusation. First, the so-called “scheme” is not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). Lastly, Chang of course teaches transferring three dimensional data (see figures 1-2 and column 5 lines 25-32: server 120 transmits transformed data, pyramidal data structure 135 which is represented in figures 3A and 3B, to computer 110 and clients 130, 140, and 150. Furthermore in Chang, source image 115 comprises digitized medical image generated from medical instrumentation such as CATSCAN, see column 5 lines 56-67 and the image generated by using CATSCAN is a three dimensional representation).

(c)It is noted that most of Applicant’s argument has no related to the claimed features. For examples, “Here, Chang et al. simply....without any support or enablement whatsoever in the specification and drawing...detail, teaching, or even a hint how to actually implement a 3D wavelet transform....streaming mechanism of the present invention” set forth at page 14 of the response. All of these are either no recited in the claims or addressed in the preceding paragraph above.

(d)In conclusion, Chang does teach the claimed invention as pointed out above and in the claim rejection presented below in this Office action.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 6, 10, 16, 20, 26, and 30-33, 35-37, and 39-54 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-42 of U.S. Patent No. 6,314,452 (referred as the patent '452 hereinafter). Although the conflicting claims are not identical, they are not patentably distinct from each other because of the reasons as follows: for example, claims 6, 16, and 26 of the instant application is a broader recitation of the invention and the claim 1 of the patent '452 covers the equivalent subject matter as that of claims 6, 16, and 26 of the instant application. Specifically, each of the limitations of claims 6, 16, and 26 of the instant application is set forth in claim 1 of the patent '452. While the patented claim 1 includes additional limitations not set forth in claims 6, 16, and 26 of the instant application, the use of transitional term "comprising" in the instant claim 6 fails to preclude the possibility of additional elements. Therefore, claims 6, 16, and 26 of the instant application fails to define an invention that is patentably distinct from claim 1 of the patent '452.

Each of dependent claims 31-33, 35-37, and 39-40 of the instant application is also defined by the claims 7 and 9 of the patent '452 so that these claims 31-33, 35-37, and 39-40 of the instant applicant also fail to define a patentably distinct invention.

The advanced statements set forth in paragraph 2 above are incorporated herein.

***Claim Rejections - 35 USC § 102***

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 6, 10, 16, 20, 26, 30-33, 35-37, and 39-54 are rejected under 35 U.S.C. 102(e) as being anticipated by Chang et al. [US Patent No. 6,711,297].

The advanced statements set forth in paragraph 2 above are incorporated herein.

Regarding claim 6, Chang teaches a system for transmitting a sequence of digital images over a communication network [see figure 1, a representative of a communication network environment comprising client-server (clients 150 and server 140) for transmitting sequence of digital images (source images 110) over a communication link (160)], comprising:

an image storage device for storing a sequence digital images [see image archive 112 of figure 1 and column 5 lines 7-11, and “storing a pyramidal data structure 130” mentioned in col. 9 lines 25-26];

a client computer coupled to the communication network [see clients 150 coupled to server 140 via communication link 160 according to figure 1], wherein the client computer

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generates a request for interaction with the sequences of images stored on the image storage device [see “client requests initial view” shown at 410 of figure 4 and mentioned in column 11 lines 6-26 in together with “client application 340” embedded in client 150 of figure 3 and mentioned in column 28-50], the request identifying a region of interest within the sequence of digital images [see image area selected by the user according to column 9 lines 45-47]; and

a server computer coupled to the communication network and the image storage device [see server 140 and image archive 112 of figure 1], wherein the server computer, in response to the request list, transmits to the client computer a number of data block corresponding to the specified quality threshold [see col. 11 line 66 to col. 12 lines 1-5], the server computer adapted to perform the steps of preprocessing said image sequence through a three dimensional wavelet transform; receiving said request list from the client computer and progressively transmitting to said client computer three dimensional coefficient data blocks corresponding to said region of interest [It is noted that the claimed features (i.e., steps of preprocessing..., receiving..., and transmitting...) recited after the phrase “adapted to perform” is nothing more than “intended use clause”. Thus, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. For a sake of explanation, Change teaches: three dimensional wavelet transform (see column 7 line 60 to col. 8 line 5. In addition, the pyramidal data structure depicted 130 in figure 1, 135 in figure 2 and mentioned every where in Chang refers to three dimensional wavelet transformed because the level representation from the base to the top of the pyramid servers as a third dimension. Also, the “level of hierarchical



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representation” mentioned in the abstract and everywhere in Chang is a third dimension in hierarchical representation and thus qualifies as the three dimensional wavelet transform. Lastly, in Chang, source image 115 comprises digitized medical image generated from medical instrumentation such as CATSCAN, see column 5 lines 56-67 and the image generated by using CATSCAN is a three dimensional representation formed by a plurality of cross-sectional views which refers to the so called “image sequence”).

Regarding claims 10, 20 and 30-31, Chang further teaches wherein: the request generated by the client computer further specifies a resolution and the server computer provides a number of data blocks corresponding to the specified quality threshold and resolution [see col. 11 line 50 to col. 12 line 6. Also refer to rejection of claim 6 above].

Regarding claim 16, it is noted that this claim is a method claim reciting features called for in claim 6 above. Therefore, claim 16 is rejected for the same reasons as set forth in claim 6 above.

Regarding claim 26, it is noted that this claim recites similar features called for in claims 6 and 16 above. Therefore, the advanced statements set forth in claims 6 and 16 are incorporated herein. Chang further teaches cache memory (see “cache memory” mentioned in column 14 lines 60-65 and “buffer” depicted at 360 of figure 3) as further required by claim 26.

Regarding claim 43, it is noted that this claim recites a computer program product having similar features called for in claims 6, 16, and 26 above. Thus, the advanced statement as applied to claims 6 and 16 above are incorporated herein. Chang further teaches the use of software [see col. 9 lines 25-32, col. 14 line 62, and col. 18 lines 15-17].

Chang further teaches thumbnail resolution images (i.e., the “512x512” portion of source image “2Kx2K” shown in figure 6B refers to the so called “thumbnail resolution images”. Also lowest resolution representation in hierarchical representation and pyramidal structure refer to the so called “thumbnail resolution images”) as further required by claims 32, 35, 39, and 44; said quality threshold (i.e., the “512x512” portion of source image “2Kx2K” shown in figure 6B in term of resolution quality, it refers to the so called “quality threshold”) as further required by claims 33, 36, 40, 45; and progressive by resolution (see pyramidal structure 130 depicted in figure 1 and decomposition processing depicted at 120 in figure 1) as required by claims 37, 41, and 46.

Regarding claim 42, this claim is rejected for the same reasons as set forth in claim 26 above.

Regarding claims 47-54, these claims are rejected for the same reasons as set forth in other claims above.

#### ***Allowable Subject Matter***

7. Claim 38 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Duy M. Dang whose telephone number is 571-272-7389. The examiner can normally be reached on Monday to Friday from 6:00AM to 2:30PM.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached on 571-272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

dmd  
6/07



**DUY M. DANG**  
**PRIMARY EXAMINER**